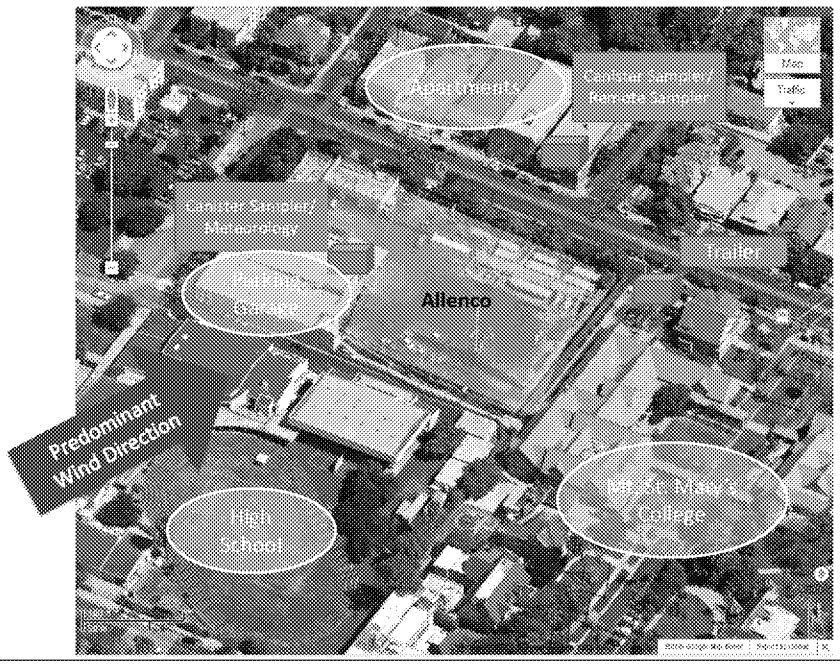
Allenco Energy, Inc. (Allenco)

Overview of Monitoring Conducted by SCAQMD

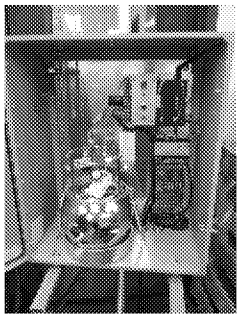
September 2018

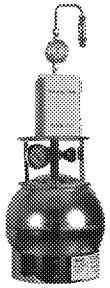
Monitoring Locations

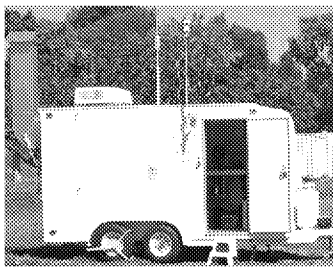


Air Monitoring

- **Parking Garage**
  - 24-hour detailed hydrocarbon analysis (ongoing in a 1-in-6-day schedule)
  - Wind speed and direction
- **Apartment**
  - Remotely triggered sample
- **Trailer**
  - Continuous Methane and Hydrocarbons
  - Automatic sample collection is triggered if high concentrations observed and brought to lab for analysis
  - 24-hour detailed hydrocarbon analysis
  - Hydrogen Sulfide - Rotten egg smell
  - PM, Ultrafine, Black Carbon

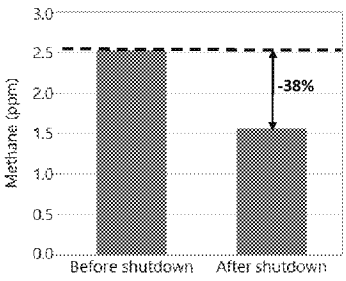


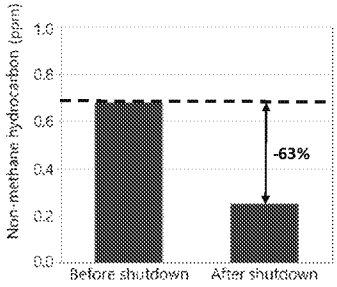


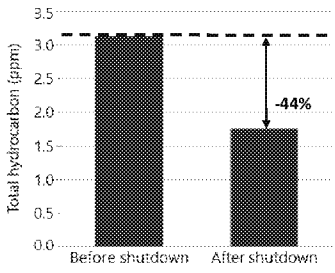


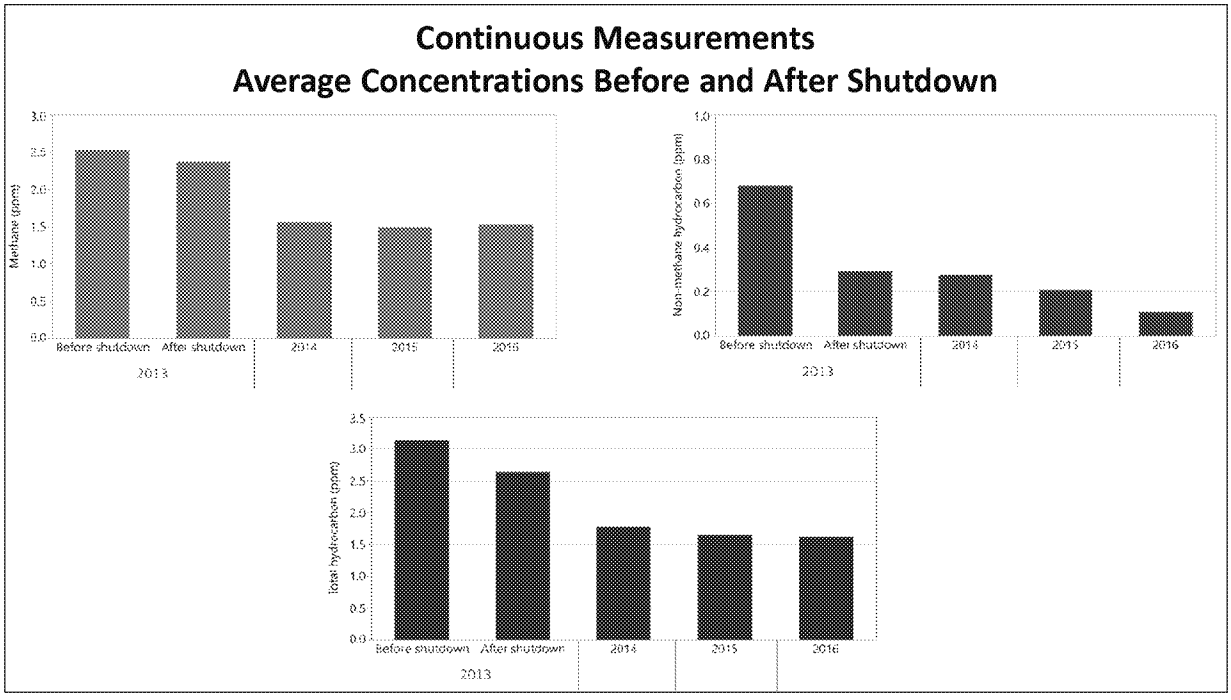
Continuous Measurements
Average Concentrations Before and After Shutdown

Continuous methane and non-methane hydrocarbon measurements
The air toxic organics compound are all non-methane hydrocarbons



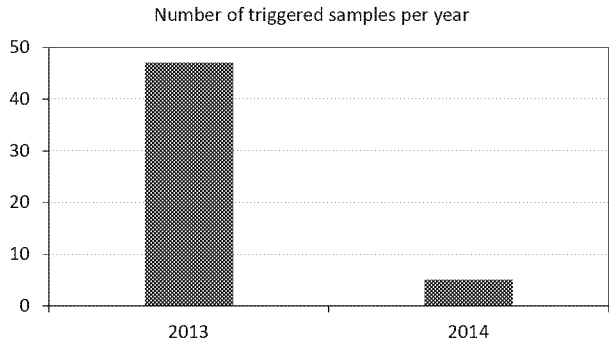





Continuous Measurements
Average Concentrations Before and After Shutdown
Methane (ppm)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Before shutdown
After shutdown
2014
2015
2016
2013
Non-methane hydrocarbon (ppm)
1.0
0.8
0.6
0.4
0.2
0.0
Before shutdown
After shutdown
2014
2015
2016
2013
Total hydrocarbon (ppm)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Before shutdown
After shutdown
2014
2015
2016
2013

Triggered Samples By Year

- **Triggered samples**: Automatic sample collection (5 minute sample) is triggered if high concentration is observed by the continuous monitor.
  - The sample is brought to lab for analysis

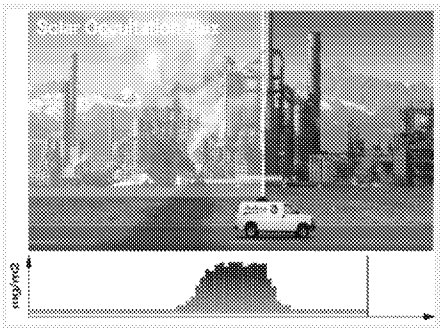


Summary of Monitoring Results

- Short-term elevated hydrocarbon concentrations
  - Mostly observed at night during typically stagnant wind conditions
  - Average hydrocarbon concentrations are lower after shutdown
  - Reduced frequency of short-term elevated levels after shutdown
- Triggered canister samples show:
  - High hydrocarbon levels driven mostly by non-toxic hydrocarbons (ethane, propane, butane, pentane)
  - Toxic hydrocarbons are below short-term exposure health guidance levels
- Long-term average concentrations for air toxic hydrocarbon gases similar to levels observed in typical ambient air

Optical Remote Sensing (ORS) Measurements

- Fluxsense Mobile Monitoring Laboratory equipped with various ORS monitors
  - Assessment of facility-wide emissions and conducting real-time measurements
- Surveyed Allenco twice
  - Sunday, July 15
  - Wednesday, July 25
- Measurements were made outside Allenco fencelines along public roads with the FluxSense mobile lab



ORS Measurement Takeaways

- Slight enhancement in methane, alkanes and benezen concentrations compared to background levels
- The enhancement is more prominent on weekday vs. weekend
- The enhancement is more prominent in vicinity of the freeway
- The major contributor to the observed enhancements is therefore likely the on-road traffic emissions